

ABSTRACT

Hot-melt Seal For Nozzles on Print Cartridges And

Method. A layer of hot-melt is adhesively bonded to a print cartridge to seal the nozzles through which ink is jetted. In another aspect, a layer of hot-melt seals the electrical contacts and leads mounted on the print cartridge. The hot-melt adhesive can be either laminated with a moisture retardant (preferably impermeable) base film or block coated on moisture retardant (preferably impermeable) pouch material. These materials are thereafter adhesively bonded to the print cartridge, sealing the nozzles and preferably the electrical contacts and leads as well.

In one application process, a hot-melt moisture retardant laminate tape is cut to size, releasably captured, positioned over the nozzles, and heat staked to seal the nozzles of the print cartridge. In a second application process, a layer of hot-melt is directly applied over the nozzles and a layer of moisture retardant material is heat staked to the hot-melt. In a third application process, heat stakable pouch material is block coated with hot-melt, the block coated hot-melt is positioned over the nozzles and heat staked, and the print cartridge is thereafter flow wrapped. In a fourth application process a hot-melt, moisture retardant tape is cut to size and heat staked to seal the nozzles of a print cartridge. Thereafter a free-end of the tape is heat staked into a pouch material and then the print cartridge is flow wrapped with the pouch material.